

# Influence of Preschool Teachers' Academic and Professional Qualification on Effective Implementation of Early Childhood Education Curriculum in Preschools in Kisii Central Sub-County, Kenya

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**Abstract:** Studies in Kisii Central Sub-County, Kenya shows a worrying trend in children's academic achievement at preschool level, therefore the current study established how academically and professionally preschool teachers are prepared to effectively implement ECDE curriculum. This study was guided by descriptive survey design and Fullan (1991) Curriculum Implementation Model. The population sample included 58 primary head teachers and 52 preschool teachers. The validity of the instruments was determined through the expert judgement by the university lecturer. Reliability was established by calculating internal consistency using cronbach's alpha formula and reliability of 0.826 was reported. The questionnaires and interview schedule were administered to collect data, for a period of 3 months. The quantitative data was analyzed using descriptive statistics such as frequencies and percentages. Qualitative data from interviews was analyzed thematically. The study findings were; that most preschool teachers had the necessary academic qualification as a foundation for training in ECDE curriculum implementation. The study also found that there was low extent of professional training among preschool teachers in Kisii Central Sub-county. The Kenyan Ministry of Education should design policies and programs that encourage preschool teacher training and in-service training of the preschool teachers to enhance their service offering techniques for effective implementation of the ECDE curriculum.

**Keywords:** ECDE curriculum, Preschools. Curriculum Implementation.

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## 1. INTRODUCTION

### Background to the study:

Preschool teachers' academic and professional qualifications demonstrate an important but complex association to learners' outcome. Learners acquire more knowledge from teachers with high academic skills than teachers with weak academic skills. The implementation of school curriculum is greatly affected by teachers' academic qualification (Lawless & Pellegrino, 2007). Huang & Moon (2009) argues that teacher qualification account for approximately 40 to 60 percent of the variance in average of students' achievement. This therefore is an indication of the importance of proper academic and professional qualification on ECDE curriculum. Chetty, Friedman, and Rockoff (2011) found that learners assigned to high quality teachers have high test score because their teachers are able to interpret and cover the curriculum well.

In Europe Barber & Mourshed's (2007) did a study so as to improve classroom instruction and learners achievement that is getting the right people to become teachers, developing that person's ability to teach well and guarantying that the education system delivering the best likely instruction for every child. Barber et al (2007) study should awaken education policy developers and educators to ensure that quality delivery of the curriculum is provided by well qualified preschool teachers. Barber et al study differs with the current study in that it was carried out in Europe and the current was carried out in Kisii, Kenya.

In Ohio State, USA, Rockstroh (2013) study on teacher characteristics on learner's achievement in of high schools used data from the Ohio Department of Education (ODE) and the Census Bureau. Rockstroh found that high percentage of high school teachers with master's degrees from higher learning institution was positively associated with the Ohio Grade Test (OGT) pass rate. This revelation support the idea that the more formalized professional training a teacher accomplish the more successful learners the teacher produces. It's important to examine teachers' professional attainment as it determine or have an effect on school curriculum implementation and learner's achievement. The study by Rockstroh (2013) differs with the current study since it was based on teacher characteristics on learner's achievement in of high schools and was conducted in Ohio State in USA. The study also was an historical study which used data from the Ohio Department of Education (ODE) and the Census Bureau. On the other hand, the current study involved preschool teachers in Kisii Sub-County, Kenya and collected data from the field using questionnaire, interview schedule and document analysis.

Another study in USA on teacher quality and student achievement by Douglas & Tim (2007) which conducted a pre test-post test experimental analysis on the effects of teacher training on the effects of student achievement based on standardized tests found evidence teacher's ability and experience to increase student achievement. Douglas et al study was based on experimental design which manipulates variables to observe their effect. The current study on the other hand had interview data hence filling in gaps in literature.

In Punjab in Pakistan Mohammad (2011) study among secondary school students on the impact of teacher quality on the academic achievement of students found that teachers with higher levels of education teach well than those with low levels of education. Academically qualified teachers were found to have more authentic knowledge relevant to subjects taught than the academically less qualified teachers. The review study was done in Pakistan among secondary pupils while the current study was conducted in preschools in Kenya to fill in gaps in literature.

In China Bai, Luo & Yin. (2004) study on problems in preschool teacher continuing training found that the major problem in preschools is the low expertise of Chinese preschool teachers and Early Childhood Education caregivers. The finding indicated that while urban preschools were staffed by preschool teachers whose preparation varies from secondary school training or less, up to college level and beyond, the situation was worse in rural areas. A few preschool teachers in rural areas hold degrees in childhood education from vocational middle schools and vocational high schools. Bai, Luo, & Yin. (2004) finding also shows that a considerable number of those who hold college degrees are non-child education majors. Many teachers have very limited, if any, formal training related to child development and also new training opportunities in China are extremely limited. This kind of situation hampers curriculum implementation. The review study in china and based on problems in kindergarten teacher continuing training, but it did not include Kenya. The present study was based on Kenyan context and it filled in gaps in literature.

In Zimbabwe a study was conducted in Harare Primary Schools by Chikutuma (2013) to ascertain the quality ECDE programs. The study was based on qualitative methods using observation checklists and interview Schedule to collect data. The study sampled ten head teachers, ten pre-school teachers and ten parents. The data analyse involved thematic analyses. The found that head teachers ineffectually ran the ECDE curriculum. The study also found that ECDE workforce had varied qualifications were varied. The study differs with the current study in that it was based on qualitative methods while the current study is mixed method design. The study was also done in primary schools while the current study will be carried in the preschools.

In Kenya, a study done by Nga'sike (2004) found out that majority of preschool teachers had low academic qualification and the low academic qualification was affecting the quality of teaching of ECDE teachers. If the teacher is qualified, he/she is likely to have well performing students but unqualified teacher is likely to have poor performing students. The reviewed study was quantitative in nature and it lacked a qualitative aspect while the current study involved both qualitative and quantitative techniques.

Gillian (2010) study whose main aim was to find out the challenges faced in the provision of Early Childhood Education in Kitui District adopted a descriptive survey design. Using simple random sampling procedure the researcher selected ECDE centers. The study sample included 20 ECDE centre, 40 preschool teachers and 20 primary school head teachers. Data was collection tools included questionnaire for preschool teachers and an interview schedule for primary head teachers. The study established that provision of quality Early Childhood development and Education (ECDE) in Kitui District is faced a number of challenges, key among them was lack of adequately trained teachers, failure to follow the designed ECDE curriculum. The review study above was carried out in Kitui unlike the present which was done in Kisii county to fill in gaps in literature.

Nyabuto (2005) study explored factors constraining to management of Early Childhood Education in Gucha District. The sample for this study included 31 pre-schools 62 preschool teachers. Data was collected through questionnaires and interview. Data was analyzed using descriptive statistics and inadequate parental support. The study finding indicated that there was inadequate syllabus coverage leading to ECDE poor curriculum implementation. Study also revealed that 10% of ECDE teachers were KCPE holders and 90% were KCSE/KCE holders. This shows that majority of ECDE teachers were form four graduates. Although Nyabuto's study collected data through questionnaires and interviews it was based on management issues in preschools in Gucha District but didn't focus on teacher related factors in the implementation of the curriculum. Hence the present study filled in gap in literature.

In Kisii Central Sub-County, Kenya studies shows a worrying trend on children's academic achievement at preschool level. The reading achievements are too low that is 13% cannot read at all, 12%, at letter level and 30% at word level. The poor academic achievement implies very weak curriculum implementation in ECDE. It can be seen that about a quarter children are at the level of not reading at all and at letter level. This necessitated the research to assess the influence of teacher related factors in effective implementation of the ECDE Curriculum.

#### **Statement of the problem:**

Although, the ECDE policy 2006 stipulates that all preschool teachers should effectively implement the ECDE curriculum, studies show that curriculum is not effectively implemented in preschools. Evidence from the study conducted by Uwezo (2011) in Kisii Central Sub-County indicated low achievement levels in literacy and numeracy, which reflect poor curriculum implementation at ECDE. The studies available investigated the actual factors contributing to the low achievement levels. Furthermore, the outcry over low achievement levels is a recent concern. It is not known whether preschool teacher academic levels of education and professional qualification of teachers, could be contributing to the decline in proper preparation of children in preschool level which in turn leads to low achievement levels in the proceeding academic levels.

#### **The Purpose of the study:**

The purpose of this study established how academically and professionally preschool teachers are prepared to effectively implement ECDE curriculum in Kisii Central Sub-County, Kenya.

#### **Significance of the Study:**

The findings of this study may be significant to preschool teachers who are the implementers of the ECDE curriculum re-evaluate themselves so as improve their teaching. Besides, it may assist the educationalist at the university and preschool teachers training colleges in preparing well grounded preschool teachers to effectively implement the ECDE curriculum. Finally, effective implementation of the curriculum will enhance learning at the preschools which will contribute to higher achievements in academics.

#### **Fullan's conceptual frame work of the Phases of Curriculum Change:**

Fullan (1991) projected that there are 4 phases in the curriculum change process: initiation, implementation, continuation, and outcome. These processes interrelate so as to produce good outcome in any curriculum.



Figure 1: Phases in the Curriculum Change Process

**a) Initiation phase:**

Fullan (1991) asserts that there are factors affect the initiation phases include quality of innovation, administration, teacher factors and other exterior agents.

**b) Implementation phase:**

During curriculum implementation Fullan identified factors that affect implementation for instance characteristics of stakeholder (teachers)

**c) Continuation phase:**

Continuation is a decision about institutionalization the change which may be perhaps be positive or negative.

**d) Outcome phase:**

This phase looks at the achievement the programme has made such as that of the preschool programme.

## 2. RESEARCH METHODOLOGY

**Research design:**

The study adopted a descriptive survey design which according to Orodho (2005) is used for preliminary and exploratory studies to permit the researchers to gather data, summarize, present and interpret data for the purpose of clarification. Descriptive survey was also relevant for the study because the researcher was able to collect both quantitative and qualitative data.

**Study area:**

The study was conducted in Kisii Central Sub-County, Kisii County. Kisii Central Sub-County is one of the nine Sub-counties in Kisii County. The Population Density of Kisii Central Sub-County is 875 people per square kilometre. Kisii Central County is characterized by a mountainous topography with a number of ridges and valleys. Kisii Central Sub-County was purposefully sampled because studies by Uwezo (2011) on Annual Learning Assessment report shows that many pupils in preschool and lower primary school are poor readers and cannot do simple arithmetic below and at their level.

**Target population:**

The population of the study was 58 primary head teachers and 174 preschool teachers teaching in public and private preschool in Kisii Central sub-county. According to the records from the Sub-county Education Office, Kisii Central, there are 21 public and 37 private preschool respectively making a total of 58 preschool attached to primary schools. The table 3.1 below shows the distribution of the target population according to type of school and geographical divisions.

**Sample and sampling procedures:**

The current study employed saturated and simple random sampling techniques. Saturated sampling technique was used to sample out 58 primary head teachers since they were the only ones in charge of the administration of the ECDE Programmes and involved in the implementation of ECDE curriculum in the two divisions of Kisii Central Sub-County. Saturated sampling is a non-sampling technique in which all (100%) members of the target population are selected because they are too few to make a sample out of them (Borg & Gall, 2007). The study also employed simple random sampling to select 52 preschool teachers representing 30% of the study population as 30% is the convenient sample size for a survey study (Mugenda & Mugenda, 2005).

**Data collection instruments:**

The research instruments consisted of questionnaire, interview schedules and document analysis.

**Questionnaire for Primary School Head Teachers and Pre-school Teachers**

The questionnaires were constructed based on the study objectives and the questions. The questionnaire sought Information on level of academic qualification, level of professional training, teaching experiences and gender of the teacher.

### Interview Schedule for Primary School Head Teachers and Pre-school Teachers

A Few guiding questions were prepared focusing on the teacher related factors and its influence on ECDE curriculum; Interviews sought information on Level of Academic Qualification, Level of Professional Training, Teacher In-service Training. All interviews were recorded and transcribed for analysis purposes, with the consent of the respondents.

#### Validity of Instruments:

Validity is the degree to which the instrument measures what it is designed to measure (Mugenda & Mugenda, 2005). The instruments, immediately after the design, were presented to respondents to determine whether the questions are clear, comprehensible, and in sound order (face validity). The face validity was achieved by Expert judgment by university lecturers.

#### Reliability of Instruments:

Reliability is the degree to which the result is consistent and accurate over time. The questionnaire reliability test was done to ascertain whether the questionnaires were reliable in collecting the research data. A sample of 10 items (questions) from the questionnaire were picked and responses from ten respondents analysed. The reliability was determined using the equation for cronbach's alpha. Consequently, a reliability co-efficient of 0.826 was obtained thus the questionnaires were found to be reliable in collection of survey data.

#### Data collection procedure:

The researcher acquired a research permit from the National Commission for Science, Technology and Innovation (NACOSTI). This permit enabled the researcher to get permission from the County Commissioner and the Director of Education Kisii County and Kisii Central Sub-County Education Officer to carry out the study in the pre-schools. Respondents were informed on the importance of the study and were assured verbally of confidential treatment of information provided.

#### Methods of data analysis and presentation:

Data from questionnaires were analyzed using descriptive statistics by the help of SPSS version 22. Thematic analysis was done to obtain a general sense of the information from qualitative data.

## 3. RESULTS AND DISCUSSIONS

The researcher sought to establish how academically and professionally, the preschool teachers are prepared to effectively implement ECDE curriculum. In order to achieve this, the researcher looked into their academic qualification, and professional training .The table 1 below shows detailed findings on academic qualification and professional training.

**Table 1: Preschool Teachers' Training and qualification and experience**

Pre-school Teachers Training and Qualification	Frequency	Percentage
Highest Level of academic Qualification		
KCPE	11	21.2%
KCSE	31	59.6%
KJSE	8	15.4%
KACE	2	3.8%
Total	52	100.0%
Highest Level of Professional Training		
Un-trained	9	17.3%
Certificate in ECDE	22	42.3%
Undergoing Training	16	30.8%
Diploma in ECDE	5	9.6%
B.Ed. ECDE	0	0.0%
Total	52	100.0%

In terms of academic qualification, majority of the preschool teacher respondents (59.6%) had KCSE certificates with a significant other having KJSE (15.4%). However, 21.2% of the preschool teachers' respondents had KCPE certificates. The findings are similar to those of Mugoh (2003), who also found that 20% had CPE/KCPE qualification, 67 % had the KCSE, qualification in Education this reveals that majority of teachers are academically qualified to effectively implement the ECDE curriculum. This findings shows that the preschool teachers have the necessary academic background on which they can build their professional training to be able to implement the ECDE curriculum. The education requirement for post school professional training is generally KCSE certificates with some vocational training requiring even KCPE. Thus, with this regard, the preschool teachers have adequate academic training. These findings are in agreement with those of Chetty, Friedman, & Rockoff (2011), who found that learners assigned to high quality teachers have high test score because their teachers are able to interpret and cover the curriculum well

During the interview with the head teachers and preschool teachers, one of the themes that came up was academic qualification of the preschool teachers. It was found that academic qualification also played a critical role in curriculum implementation among the teachers, since it enable the teacher to master the content required, understand the topic and preparation before delivery. For instance, when probed on this, one of the head teachers interviewed had this to say;

*“Academic qualification helps the teacher in identifying, evaluating and accessing teaching resources such as textbooks. The teacher is also able to identify the relevant activities in the curriculum. Academic qualification helps the teacher in understanding subject content” [HT, 2]*

In a similar interview, another head teacher said: *“...The academic qualification helps in assisting the teacher in understanding the subject content, planning for the lessons through lesson plan, scheming and proper assessment of the learners” [HT, 4]*

One of the preschool teachers interviewed on this also said that: *“...academic qualification empowers the teacher to articulate his ideas and clearly disseminate the information to the learners hence is very crucial for proper implementation of the curriculum” [PT, 1]*

This shows that academic qualification helps the teacher in interpreting the curriculum and what it entails and through this, teachers also learn the application of teaching methods. In similar breadth, Mohammad (2011) found that academically qualified teachers had more authentic knowledge relevant to subjects taught than the academically less qualified teachers. Kangori (2014) also found a significant relationship between teachers' academic qualification and preschool children achievement in science activity.

With the academic qualification, it was possible to assess professional qualification and training of the preschool teachers. Majority of the preschool teachers at 42.3% had certificate in ECDE with another 9.6% having diploma. This gives a combined total of 51.9% of respondents with some training in ECDE. This finding is worrying as nearly half of the preschool teachers do not have the pre-requisite training to handle the ECDE curriculum as 17.3% reported being untrained while 30.8% were still undergoing training. This finding indicates a gap and shortage in terms of expertise and professionalism to be able to implement ECDE curriculum. It further articulates the lack of emphasis and seriousness on implementation of ECDE curriculum since less trained or untrained individuals are allowed to implement the curriculum. These individuals will lack the specific and unique tools to handle the ECDE curriculum. These findings are corroborated by Barber & Mourshed's (2007) study in Europe who found that three variables made the most difference to improve classroom instruction and learners achievement that is getting the right people to become teachers, developing that person's ability to teach well and guarantying that the education system delivering the best likely instruction for every child.

An interview with the head teachers and preschool teachers, the study found that professional qualification of a teacher was very significant in implementation of Early Childhood Education curriculum in ECDE centres. When asked on how this factor influences curriculum implementation, one of the head teachers said: *“Professional qualification has helped in understanding the educational aims, the contents and objectives of each topic. Further, professional training helps in understanding the developmental stages of the learners” [HT, 3]*

In another interview, one of the Head Teacher had to say;

*Professional qualification has helped the teacher to become confident, responsible, reflective, innovative and engaged in his or her work. It also helps the teacher to understand the individual needs of the pupil, hence varying the teacher-learning methods to that suit the individual learners [HT, 1]*

This was also similar to what was said by one of the preschool teachers during the interview, when asked to comment on effect of professional qualification on implementation of the curriculum, she said that: “...a well professionally qualified teacher is well equipped and confident to deliver his or her services, hence it makes it easier for them to adequately implement the curriculum” [PT, 2]

From these sentiments, it could be deduced that professional qualification is very crucial in achieving the objectives of learning. This was also supported by Huang & Moon (2009) who found also found that teacher professional qualification account for approximately 40 to 60 percent of the variance in average of students' achievement. Rockstroh (2013) also support the idea that the more formalized professional training a teacher accomplish the more successful learners the teacher produces.

## 4. CONCLUSION

### 4.1 Conclusion:

The study found that preschool teachers had the necessary qualification to implement and disseminate ECDE curriculum. Most of the preschool teacher respondents had KCSE certificates with a few having KJSE. The study also found that average number of preschool teachers had certificate in ECDE with few having diploma. This finding is worrying as nearly half of the preschool teachers do not have the pre-requisite training to handle the ECDE curriculum as few reported being untrained while average number were still undergoing training. This finding indicates a gap and shortage in terms of expertise and professionalism to be able to implement ECDE curriculum. The study also concludes that there is low extent of professional training among preschool teachers in Kisii Central Sub-county and this could hurt proper implementation of ECDE curriculum.

### 4.2 Recommendations:

Based on conclusions, the study makes the following recommendations:

#### Recommendations for the Policy Maker (Ministry of Education):

It was found that proper implementation of the ECDE curriculum was also hampered by inadequate training of most of the preschool teachers. The government through the ministry of education should design policies and programs that encourage in-service training of the preschool teachers to enhance their service offering techniques for effective implementation of the ECDE curriculum.

#### Recommendations for Head Teachers:

The Head teachers should also ensure proper collaboration among stakeholders such as parents, pupils, government agencies and religious leaders so as come up with measures that encourage effective implementation of the ECDE curriculum, such as organizing workshops for teachers ECDE administrators and curriculum implementers.

#### Recommendations for the ECDE Teachers:

Most of the preschool teachers should be encouraged to go for more training so as to improve their skills so as to properly implement the ECDE curriculum.

## REFERENCES

- [1] Bai A., X. Luo, X. Yin. (2004). *Problems existing in Kindergarten Teacher Continuing Training and Their Solutions*, Continuing Education, (8) [www.FSI REAP - Educational Challenges - Early Childhood Education.htm](http://www.FSI REAP - Educational Challenges - Early Childhood Education.htm)
- [2] Barber, M. & Mourshed, M. (2007). *How the World's Best-Performing School Systems come Out on Top*. London: McKinsey & Company. Available at <http://www.mckinsey.com/locations>

- [3] Chetty, R., Friedman, J. Rockoff, J., (2011). The Long-Term Impacts of Teachers: Teacher Value-Added and Student Outcomes in Adulthood. National Bureau of Economic Research 1050 Massachusetts Avenue Cambridge, MA 02138 <http://www.nber.org/papers/w17699>
- [4] Chikutuma T. (2013) The Quality of Early Childhood Development Programmes in Harare Primary Schools in Zimbabwe. Unpublished PhD. Thesis University of South Africa
- [5] Douglas N. & Tim R. (2007). *Teacher training, teacher quality and student achievement*. National Center for Analysis of longitudinal Data in Education Research: Urban Institute, USA.
- [6] Fullan, M. (1991). *Change Forces in curriculum: The Sequel*. London: Taylor and Francis.
- [7] Gillian, J. M. (2010) *Challenges faced in the provision of quality Early Childhood Education in Kitui District*. Unpublished M.Ed. Research Project. Kenyatta University: Nairobi.
- [8] Hagunama, E. (2008). *Papua New Guinea primary school technology teachers: The impact of support materials on their perception and practice* (Unpublished Master's thesis). University of Waikato, Hamilton, New Zealand.
- [9] Lawless, K., & Pellegrino, J. W. (2007). Professional development in integrating technology into teaching and learning: Known, unknowns, and ways to pursue better questions and answers. *Review of Educational Research*, 77, 575-614.
- [10] Mohammad, D. (2011). Impact of Teacher Quality on Academic Achievement of students at Secondary Stage in Punjab. *Journal of International Cooperation Education Vol. 12N0.1* Pp. 107-125.
- [11] Mugenda, O., & Mugenda, A. (2005). *Research methods: quantitative and qualitative approaches*. Nairobi: Acts Press.
- [12] Mugoh, C. (2003). *Investigation of Problems Inhibiting Access to Effective Participation In Pre-School Education Of Central Division In Embu Sub-county (KENYA)* Unpublished M.Ed thesis. Kenyatta University: Nairobi.
- [13] Ng'asike, J. (2004). *Teachers' use of play as a medium of bridging pre-school children's mathematic experiences: a case study of Kasarani Division, Nairobi*. Unpublished M.Ed. Thesis: Kenyatta University.
- [14] Nyabuto, S. (2005). *Factors constraining management of early childhood education: a case of Nyamarambe Division, Gucha District*. Unpublished M.Ed. Thesis: Kenyatta University, Nairobi.
- [15] Orodho, J. (2005). Elements of Education and Social Science Research Methods. *Bureau of Educational Research*. Kenyatta University, Nairobi Kenya.
- [16] Rockstroh, A. (2013). *Teacher Characteristics on Student Achievement: An Examination of High Schools in Ohio*, Capstone Project, Ohio.
- [17] Uwezo. (2011). *Are Our Children Learning? Annual assessment report Kenya*: Uwezo, Nairobi.